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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/827,104

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Justin L. Fort

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05/28/2009

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EXAMINER

LE, TOAN M

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/827,104	<b>Applicant(s)</b> FORT ET AL.	
	<b>Examiner</b> TOAN M. LE	<b>Art Unit</b> 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,4,6-8,13,15,31 and 47-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,6-8,13,15 and 47-56 is/are allowed.
- 6) ☒ Claim(s) 31,57 and 58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 31 and 57-58 are rejected under 35 U.S.C. 102(b) as being anticipated by “Optimization of DC Resistivity Data Acquisition: Real-Time Experimental Design and a New Multielectrode System” by Stummer et al. (referred hereafter Stummer et al.).

Referring to claim 31, Stummer et al. disclose a system for measuring a property at a surface, the system comprising:

a plurality of survey probes (Figures 2-5); and

power conduit coupled to supply power to the survey probes (Figures 4-5; page 2733, 1<sup>st</sup> col., lines 27-37);

wherein at least some of the survey probes automatically electrically disconnect from the power conduit while measuring the property and operate using an internal source of power when disconnected to reduce noise (page 2733, 1<sup>st</sup> col., lines 19-26).

As to claim 57, Stummer et al. disclose a system for measuring a property at a surface, wherein the measured property includes either or both of electrical resistivity and induced polarization (page 2733, 1<sup>st</sup> col., lines 6-18); and

wherein, during the measuring, at least one particular one of probes remains electrically connected to the power conduit and receives current supplied thereby for injection at the surface (page 2733, 1<sup>st</sup> col., lines 6-18 and lines 27-37).

Referring to claim 58, Stummer et al. disclose a system for measuring a property at a surface, further comprising:

a survey controller (Figure 3 and 4-5), wherein the power is supplied from the survey controller via the power conduit (Figures 3 and 4-5; page 2730, 1<sup>st</sup> col., Distributed Systems: lines 1-8; pages 2730-2731, Generation of the Source Currents section).

***Allowable Subject Matter***

Claims 3-4, 6-8, 13, 15, and 47-56 are allowed.

The reason for allowance of claim 3 is the inclusion of a survey controller to automatically poll the survey probes to obtain respective identifiers and determine a relative order of the probes; each survey probe configured to disconnect a downstream neighbor survey probe and enter an idle state, report its unique identifier to the survey control if in the idle state and in response to a polling command from the survey probe, and change to a state other than the idle state after reporting its unique identifier.

The reason for allowance of claims 4, 6-8, 13, and 15 is they depend upon the allowable claim 3.

The reason for allowance of claim 47 is the inclusion of automatically determine at least a relative ordering of the survey probes with respect to each other and to thereafter command individual ones of the survey probes based on the automatically determined relative ordering.

The reason for allowance of claims 48-50 is they depend upon the allowable claim 47.

The reason for allowance of claim 51 is the inclusion of automatically determining a relative position of each of the survey probes as placed and commanding individual ones of the survey probes using the obtained unique identifiers and based on the determined relative positions thereof.

The reason for allowance of claims 52-56 is they depend upon the allowable claim 51.

### ***Response to Arguments***

Applicant's arguments with respect to claims 3-4, 6-8, 13, 15, 31, and 47-58 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN M. LE whose telephone number is (571)272-2276. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Toan Le

/TL/  
May 21, 2009

/Michael P. Nghiem/  
Primary Examiner, GAU 2863